(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/000121 A1

(51) International Patent Classification[7]: A61B 6/03

(21) International Application Number:
PCT/IB2004/001968

(22) International Filing Date: 28 May 2004 (28.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/483,739 30 June 2003 (30.06.2003) US

(71) Applicant *(for all designated States except US)*: KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: MATTSON, Rodney, A. [US/US]; 595 Miner Road, Cleveland, OH 44143 (US).

(74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS N.V.; C/O LUNDIN, Thomas, M., 595 Miner Road, Cleveland, OH 44143 (US).

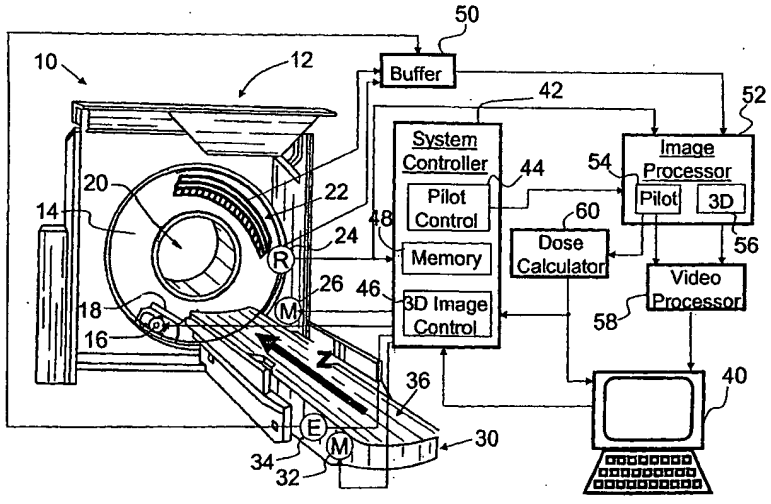
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTOUR AND SCOUT SCANNING TECHNIQUE FOR PULSED X-RAY LARGE AREA CT DETECTORS



(57) Abstract: A diagnostic imaging system includes an x-ray source (16), which is rotated around an examination region (20). A subject, disposed on a couch (30), is translated longitudinally through the examination region (20). The x-ray source (16) is pulsed at selected angular location(s), e.g. one or both of 6 and 12 o'clock, to transmit x rays through the subject as it is being translated through the examination region (20). The transmitted radiation is being detected by a radiation detector (22) and is reconstructed by an image processor (52) into a two-dimensional projection pilot scan image. A subject contour is calculated and is used along with the radiation attenuation data by a dose calculator (60) to determine the minimum radiation dose required to produce a constant quality image.

WO 2005/000121 A1